



**CE Marked Material**  
**QCRHIV1p24QC1 - HIV-1 p24 Quality Control Serum Sample 1**  
**NIBSC code: QCRHIV1p24QC1**  
**Instructions for use**  
**(Version 2.0, Dated 21/03/2024)**

This material is an 'Annex II List A' IVD and complies with the requirements of the "EU in vitro diagnostic medical device directive 98/79/EC"

### 1. INTENDED USE

**This product is CE marked for use as an IVD within the UK, EU member states and EEA countries. In all other territories this product can be used for research purposes only.**

HIV-1 p24 QC1 (23/B906) is intended for use in the internal laboratory quality control of immunoassays that detect human immunodeficiency virus type 1 p24 antigen. The HIV-1 p24 QC1 should be included in each run as part of a continuing quality control programme to monitor the performance of the assay. Data obtained with the HIV-1 p24 QC1 can be used to construct quality control charts that can be visually monitored each time the assay is run, to check for consistency of performance of the assay. Examples of how these charts are constructed and used have been described elsewhere.

1. HIV-1 p24 QC1 is NOT INTENDED TO BE USED TO COMPARE THE SENSITIVITY OF PARTICULAR ASSAYS

### 2. CAUTION

**This preparation is not for administration to humans or animals in the human food chain.**

The preparation contains material of human origin, and either the final product or the source materials, from which it is derived, have been tested and found negative for HBsAg, anti-HIV and HCV RNA. As with all materials of biological origin, this preparation should be regarded as potentially hazardous to health. It should be used and discarded according to your own laboratory's safety procedures. Such safety procedures should include the wearing of protective gloves and avoiding the generation of aerosols. Care should be exercised in opening ampoules or vials, to avoid cuts. HIV-1 p24 QC1 was prepared using recombinant HIV-1 p24 antigen produced in a baculovirus expression system. The HIV-1 p24 antigen is recognised by monoclonal and polyclonal anti-p24 (HIV-1) antibodies in commercial EIA kits. The reactive material used to prepare HIV-1 p24 QC1 was non-reactive for HBsAg, anti-HIV and anti-HCV using commercial EIA kits. The reactive sera were pooled and then diluted in a pool of defibrinated human plasma donations non-reactive for HIV-1 p24 antigen. These samples were non-reactive for HBsAg, anti-HCV and anti-HIV1/2 using commercial EIA kits. Bronidox® was added to a concentration of 0.05%(w/v) as a preservative.

### 3. UNITAGE

Table 1 gives a summary of the results obtained for HIV-1 p24 QC1 23/B906-xx. These results are intended only as a guide to the approximate levels of reactivity to be expected, and may not be exactly reproduced in other laboratories. In each case, at a minimum, three samples of HIV-1 p24 QC1 were tested on three separate occasions. The results are expressed as the ratio of mean optical density or other measurement of the HIV-1 p24 antigen response of the QC1 sample, to the kit manufacturer's calculated cut-off.

### 4. CONTENTS

Country of origin of biological material: United Kingdom.  
Ready-to-use reagent  
REF QCRHIV1p24QC1 1x 7mL Blood Tubes  
Defibrinated Plasma 4mL  
Bronidox® (Sigma-Aldrich) 0.05% (w/v)

### 5. STORAGE

o Reagents are to be kept at 2-8°C upon receipt  
o Reagents may be stored at 2-8°C until use by date  
o For single use only reagents should be divided into measured aliquots of one use and stored below -20°C to avoid freeze/thaw cycles. Once thawed use immediately. Do not refreeze  
o Ensure all containers are properly sealed to avoid drying out of the reagent  
o Avoid microbial contamination of this product as this may alter product performance  
o Avoid excessively high temperatures or humidity.  
Please note because of the inherent stability of lyophilized material, NIBSC may ship these materials at ambient temperature.

### 6. DIRECTIONS FOR OPENING

Vials have a screw cap; an internal stopper may also be present. The cap should be removed by turning anti-clockwise. Care should be taken to prevent loss of the contents. Please note: If a stopper is present on removal of the cap, the stopper should remain in the vial or be removed with the cap.

### 7. USE OF MATERIAL

**No attempt should be made to weigh out any portion of the freeze-dried material prior to reconstitution**

1. Use of this reagent is to be restricted to trained laboratory staff only
2. Use suitable (latex/nitrile) gloves and eye/skin protection
3. Include reagent as a normal sample in routine work list
4. Allow reagent to reach room temperature before use
5. Plot reagent result on a QC chart to monitor performance

### 8. STABILITY

Reference materials are held at NIBSC within assured, temperature-controlled storage facilities. Reference Materials should be stored on receipt as indicated on the label.

NIBSC follows the policy of WHO with respect to its reference materials.

Real-Time Stability studies take place to ensure stated stability of this product

### 9. REFERENCES

1. Levey, S. and Jennings, E.R. (1950) The use of control charts in clinical laboratories. Am.J.Clin.Pathol. 20, 1059-1066

### 10. ACKNOWLEDGEMENTS

EC REP Advena Ltd. Tower Business Centre, 2nd Floor, Swatar, BKR 4013, Malta

### 11. FURTHER INFORMATION

Further information can be obtained as follows;  
This material: enquiries@nibsc.org  
WHO Biological Standards:  
<http://www.who.int/biologicals/en/>  
JCTLM Higher order reference materials:  
<http://www.bipm.org/en/committees/jc/jctlm/>





Derivation of International Units:

[http://www.nibsc.org/standardisation/international\\_standards.aspx](http://www.nibsc.org/standardisation/international_standards.aspx)

Ordering standards from NIBSC:

<http://www.nibsc.org/products/ordering.aspx>

NIBSC Terms & Conditions:

[http://www.nibsc.org/terms\\_and\\_conditions.aspx](http://www.nibsc.org/terms_and_conditions.aspx)

## 12. CUSTOMER FEEDBACK

Customers are encouraged to provide feedback on the suitability or use of the material provided or other aspects of our service. Please send any comments to [enquiries@nibsc.org](mailto:enquiries@nibsc.org)

## 13. CITATION

In all publications, including data sheets, in which this material is referenced, it is important that the preparation's title, its status, the NIBSC code number, and the name and address of NIBSC are cited and cited correctly.

## 14. MATERIAL SAFETY SHEET

Classification in accordance with Directive 2000/54/EC, Regulation (EC) No 1272/2008: Not applicable or not classified

Physical and Chemical properties	
Physical appearance: Liquid	Corrosive: No
Stable: Yes	Oxidising: No
Hygroscopic: No	Irritant: No
Flammable: No	Handling: See caution, Section 2
Other (specify):	
Toxicological properties	
Effects of inhalation:	Not established, avoid inhalation
Effects of ingestion:	Not established, avoid ingestion
Effects of skin absorption:	Not established, avoid contact with skin
Suggested First Aid	
Inhalation:	Seek medical advice
Ingestion:	Seek medical advice
Contact with eyes:	Wash with copious amounts of water. Seek medical advice
Contact with skin:	Wash thoroughly with water.
Action on Spillage and Method of Disposal	
Spillage of ampoule contents should be taken up with absorbent material wetted with an appropriate disinfectant. Rinse area with an appropriate disinfectant followed by water. Absorbent materials used to treat spillage should be treated as biological waste.	

## 15. LIABILITY AND LOSS

In the event that this document is translated into another language, the English language version shall prevail in the event of any inconsistencies between the documents.

Unless expressly stated otherwise by NIBSC, NIBSC's Standard Terms and Conditions for the Supply of Materials (available at [http://www.nibsc.org/About\\_Us/Terms\\_and\\_Conditions.aspx](http://www.nibsc.org/About_Us/Terms_and_Conditions.aspx) or upon request by the Recipient) ("Conditions") apply to the

exclusion of all other terms and are hereby incorporated into this document by reference. The Recipient's attention is drawn in particular to the provisions of clause 11 of the Conditions.

## 16. INFORMATION FOR CUSTOMS USE ONLY

<b>Country of origin for customs purposes*:</b> United Kingdom * Defined as the country where the goods have been produced and/or sufficiently processed to be classed as originating from the country of supply, for example a change of state such as freeze-drying.
<b>Net weight:</b> 4g
<b>Toxicity Statement:</b> Toxicity not assessed
<b>Veterinary certificate or other statement</b> if applicable.
<b>Attached:</b> No



**Table 1.** Results obtained for HIV-1 p24 QC1 (Lot Number: **23/B906**) using the following EIA kits.

EIA Kit	Method	Test Cut-Off Ratio	
		Mean	SD (n-1)
<b>Liaison Murex HIV Ag</b> Manufacturer: DiaSorin Catalogue Number: <b>310260</b> Lot Number: <b>139059</b>	<b>Automated Protocol</b>	<b>S/CO</b> 38.4	1.31
<b>Murex HIV Ab/Ag Combo</b> Manufacturer: DiaSorin Catalogue Number: <b>7G79-09</b> Lot Number: <b>E030410</b>	<b>Standard Protocol</b>	<b>OD/CO</b> 15.1	0.5